9 on the 9th, 16th, and 19th; and in 1 to 4 on the 17th and 18th. There were no dates on which thunderstorms were not

reported.

on the greatest number of dates, 24, in Missouri; on 23 in Florida; on 15 to 20 in Alabama, Arkansas, Georgia, Illinois, Iowa, Kansas, Louisiana, Mississippi, Nebraska, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Texas, and Virginia; on 10 to 14 in Indiana, Kentucky, Maryland, Massachusetts, Michigan, Montana, North Carolina, South Carolina, South Dakota, West Virginia, and Wisconsin; on 5 to 9 in Connecticut, District of Columbia, Minnesota, North Dakota, and Oklahoma; and on 1 to 4 in Delaware, Indian Territory, Maine, New Hampshire, Rhode Island, and Vermont.

West of the Rocky Mountains thunderstorms were reported region.

to 14 on the 5th, 7th, 8th, 10th, 12th, 22d, and 25th; in 5 to in Arizona, on the 10th to 13th, and 15th; in California on the 4th, 7th, 8th, 10th to 14th, 16th, 17th, 26th, and 27th; in Colorado on the 2d to 8th, 10th, 13th to 18th, 21st, 26th, 27th, 28th, and 31st; in Idaho on the 16th, 17th, 22d, and 29th; in East of the Rocky Mountains thunderstorms were reported Nevada on the 5th, 7th, 8th, and 12th; in New Mexico on the 5th, 6th, 7th, 9th, 13th, and 14th; in Oregon on the 2d, 3d, 15th, 17th, 25th, and 31st; in Utah on the 9th, 21st, and 26th; in Washington on the 2d, 7th, 15th, 16th, 17th, and 25th; and in Wyoming on the 3d, 4th, 5th, 18th, 19th.

### AURORAS.

On the 7th auroras were reported in New England, New Jersey, New York, the Lake region, and the extreme upper Mississippi, Red River of the North, and upper Missouri valleys. On the 9th auroras were noted at points in the Lake

# STATE WEATHER SERVICES.

[Temperature in degrees Fahrenheit; precipitation, including melted snow, in inches and hundredths.]

The following extracts and summaries are republished from reports for May, 1893, of the directors of the various state weather services:

## ALABAMA.

Temperature.—The mean was 2.5 below the normal; maximum, 96, at Healing Springs, 25th; minimum, 38, at Valley Head, 4th; greatest monthly range, 56, at Healing Springs; least monthly range, 30, at Daphne.

Precipitation.—The average was 3.83 above the normal; greatest monthly, 18.05, at Union; least monthly, 4.03, at Geneva.

Wind.—Prevailing direction, south.—P. H. Mell, Observer, Weather Bu reau, Auburn, director.

## ARIZONA.

Temperature.—The mean was 1.7 above the normal; maximum, 110, at Buckeye, 21st; minimum, 20, at Whipple Barracks, 3d; greatest monthly range, 63, at Holbrook and San Carlos; least monthly range, 43, at Saint Helena Ranch.

Precipitation.—Greatest monthly, 2.18, at Fort Apache; least monthly,

0.00, at Calabasas

Wind.—Prevailing direction, southwest.—W. Burrows, Observer, Weather Bureau, Tucson, director.

# ARKANSAS.

Temperature.—The mean was 0.5 below the normal; maximum, 94, at Hot Temperature.—The mean was 0.5 below the normal; maximum, 94, at Hot Springs, 25th, at Pine Bluff, 19th, and at Texarkana, 27th; minimum, 38, at Keesees Ferry, 2d; greatest monthly range, 54, at Keesees Ferry; least monthly range, 37, at Marcella.

Precipitation.—The average was 4.72 above the normal; greatest monthly, 19.88, at Lonoke; least monthly, 5.21, at Kirby.

Wind.—Prevailing direction, south.—F. H. Clarke, Local Forecast Official, Weather Bureau, Little Rock, director.

# CALIFORNIA.

Temperature.—The mean was 2.0 below the normal; maximum, 108, at Needles, 31st; minimum, 28, at Meadow Valley, 18th, and at Fort Bidwell, 1st and 21st; greatest monthly range, 64, at Tulare; least monthly range, 19, at Poway.

Precipitation.—The average was 0.11 below the normal; greatest monthly,

5.61, at Shasta; least monthly, 0.00, at a number of station

Wind.—Prevailing direction, west.—J. A. Barwick, Observer. Weather Bureau, Sacramento, director.

# COLORADO.

Temperature.—The mean was 2.0 below the normal; maximum, 98, at

Downing, 16th; minimum, -2, at Pikes Peak, 1st.

Precipitation.—The average was about 0.50 below the normal; greatest monthly, 6.30, at Saint Cloud; least monthly, 0.09, at Las Animas.

Wind.—Prevailing direction, west.—J. J. Gilligan, Observer, Weather Bureau, Denver, director.

# FLORIDA.

Temperature.—The mean was about 2.0 above the normal; maximum, 101, at Micco, 29th; minimum, 49, at New Smyrna, 5th; greatest monthly range,

46, at Plant City; least monthly range, 19, at Key West.

Precipitation.—The average was about 0.50 below the normal; greatest monthly, 7.98, at Kissimmee; least monthly, 1.64, at Tarpon Springs.

Wind.—Prevailing direction, southeast.—E. R. Demain, Observer, Weather

Bureau, Jacksonville, director.

21st; minimum, 38, at Diamond, 4th and 19th; greatest monthly range, 57, at Americus and Hawkinsville; least monthly range, 35, at Monticello.

Precipitation.—Greatest monthly, 7.68, at Thomasville; least monthly, 1.20, at Darien.

Wind.—Prevailing direction, west.—Park Morrill, Local Forecast Official, Weather Bureau, Atlanta, director.

The month was cold and unseasonable.

Temperature.—Maximum, 91, at Payette, 15th; minimum, 12, at Lake, 1st; reatest monthly range, 73, at Lake; least monthly range, 46, at Moscow Precipitation.—Greatest monthly, 3.75, at Fort Sherman; least monthly,

0.35, at Lake. Wind.—Prevailing direction, southwest.—J. H. Smith, Observer, Weather Bureau. Idaho Falls, director.

# ILLINOIS.

Temperature.—The mean was 2.7 below the normal; maximum, 95, at McLeansboro, 20th; minimum, 25, at Fort Sheridan, 1st.

Precipitation.—The average was 0.10 below the normal; greatest monthly, 8.05, at Atwood; least monthly, 1.60, at Hennepin.

Wind.—Prevailing direction, northwest.—John Craig, Observer, Weather Bureau, Springfield, director.

# INDIANA.

Temperature.—The mean was 1.4 below the normal; maximum, 94, at Bedford, 22d; minimum, 31, at Cambridge City, 19th; greatest monthly range, 58, at Bedford; least monthly range, 39, at Degonia Springs.

Precipitation.—The average was 0.06 above the normal; greatest monthly, 9.60, at Marengo; least monthly, 1.45, at Muncie.

Wind.—Prevailing direction, southwest.—Prof. H. A. Huston, Lafayette, director; C. F. R. Wappenhans, Local Forecast Official, Weather Bureau, assistant.

# IOWA WEATHER AND CROP SERVICE.

Temperature.—The mean was 3.0 below the normal; maximum, 96, at Glenwood, 9th; minimum, 26, at Atlantic, 2d; greatest monthly range, 63, at Atlantic and Glenwood; least monthly range, 42, at Delaware.

Precipitation.—The average was about 1.00 below the normal; greatest

monthly, 5.82, at Carroll; least monthly, 1.65, at Sibley.

Wind.—Prevailing direction, northwest.—J. R. Sage, Des Moines, director; G. M. Chappel, Local Forecast Official, Weather Bureau, assistant.

# KANSAS.

Temperature.—The mean was 1.8 below the normal; maximum, 101, at Syracuse, 20th; minimum, 17, at Colby, 1st; greatest monthly range, 80, at Syracuse; least monthly range, 44, at Lawrence.

Precipitation.—The average was 1.51 below the normal; greatest monthly,

7.62. at Lawrence; least monthly, 0.40, at Shields.

Wind.—Prevailing direction, south.—T. B. Jennings, Observer, Weather Bureau, Topeka, director.

# KENTUCKY.

Temperature.—The mean was about 3.0 below the normal; maximum, 96, Wind.—Prevailing direction, southeast.—E. R. Demain, Observer, Weather ureau, Jacksonville, director.

GEORGIA.

Temperature.—Maximum, 100, at Americus, Cordele, and Hawkinsville,

GEORGIA.

Temperature.—Ine mean was about 5.0 below the normal; maximum, 90, at Louisa, 21st; minimum, 37, at Harrodsburg, 18th; greatest monthly range, 32, at South Fork.

Precipitation.—The average was about 2.00 above the normal; greatest monthly, 10.41, at Franklin; least monthly, 2.59, at Catlettsburg.

Wind.—Prevailing direction, southwest.—Frank Burke, Local Forecast Official, Weather Bureau, Louisville, director.

### LOUISIANA

Temperature.—The mean was 1.0 above the normal; maximum, 98, at Lake Providence, 27th; minimum, 42, at Minden, 3d; greatest monthly range, 77, at Amite; least monthly range, 69, at Plain Dealing.

Precipitation.—The average was 1.78 above the normal; greatest monthly,

10.68, at Baton Rouge; least monthly, 2.07, at West End.

Wind. — Prevailing direction, south: — R. E. Kerkam, Local Forecast Official, Weather Bureau, New Orleans, director.

Temperature.—Maximum, 92, at Boettcherville and Millsboro, Del., 28d; minimum, 33, at Sunnyside, 10th: greatest monthly range, 55, at Millsboro, Del.; least monthly range, 87, at Cambridge.

Precipitation.—Greatest monthly, 6.60, at Fenby; least monthly, 3.06, at

Milford, Del.
Wind.—Prevailing direction, southeast.—Dr. William B. Clark, Johns Hopkins University, Baltimore, director; Prof. Milton Whitney, Maryland Agricultural College, secretary and treasurer; C. P. Cronk, Observer, Weather Bureau, in charge.

## MICHIGAN.

Temperature.—The mean was 3.5 below the normal; maximum, 90, at Rawsonville, 22d; minimum, 21, at Bellaire, 5th; greatest monthly range, 59, at Evart; least monthly range, 33, at Hillsdale.

Precipitation.—The average was 0.78 below the normal; greatest monthly,

4.96, at Benton Harbor; least monthly, 0.83, at Montague.

Wind.—Prevailing direction, northwest.—E. A. Evans, Local Forecast Official, Weather Bureau, Detroit, director.

## MINNESOTA.

Temperature.—Maximum, 86, at Crookston, 31st; minimum, 19, at Pokegama Falls, 7th; greatest monthly range, 60, at Crookston; least monthly range, 41, at Duluth.

\*\*Precipitation.—Greatest monthly, 4.91, at Rolling Green; least monthly,

1.06, at Moorhead.

Wind.—Prevailing directions, north and northwest.—E. A. Beals, Observer, Weather Bureau, Minneapolis, director.

## MISSISSIPPI.

Temperature.—The mean was 1.0 below the normal; maximum, 97, at Water Valley, 26th; minimum, 42, at Jackson, 3d; greatest monthly range, 68, at Agricultural College; least monthly range, 24, at Biloxi.

Precipitation.—The average was 8.95 above the normal; greatest monthly,

18.49, at Batesville; least monthly, 2.79, at Biloxi.

Wind.—Prevailing direction, southwest.—R. J. Hyatt, Local Forecast Official, Weather Bureau, Vicksburg, director.

# NEBRASKA.

Temperature. - Maximum, 101, at Superior, 14th; minimum, 18, at Indianola, 22d.

Precipitation.—Greatest monthly, 7.49, at Kearney; least monthly, 0.72, at

Wind.—Prevailing direction, northwest.—Prof. Goodwin D. Swezey, Crete, director; G. A. Loveland, Observer, Weather Bureau, assistant.

# NEVADA.

Temperature.—The mean was 3.9 below the normal; maximum, 98, at Tuscarora, 15th; minimum, 18, at Tuscarora, 7th, and at Stofiel, 26th.

Precipitation.—The average was 0.66 below the normal; greatest monthly, 1.27, at Stofiel; least monthly, 0.00, at Golconda, Elko, Mill City, Hawthorne, and Belleville.

Wind.—Prevailing direction, southwest.—Prof. Charles W. Friend, Carson City, director; F. A. Carpenter, Observer, Weather Bureau, assistant.

# NEW ENGLAND.

Temperature.—The mean was 0.6 below the normal; maximum, 98. at Brookline, 23d; minimum, 25, at Farmington, 9th, and at Hartland, 8th; greatest monthly range, 65, at Farmington and Plymouth; least monthly range, 32, at Nantucket and Block Island.

Precipitation.—The average was 1.93 above the normal; greatest monthly, 8.82, at Cornish; least monthly, 1.15, at Mattawamkeag.

Wind.—Prevailing direction, southwest.—J. Warren Smith, Observer, Weather Bureau, Boston, director.

# NEW JERSEY.

Temperature.—The mean was 0.8 below the normal; maximum, 95, at New Brunswick, 23d; minimum, 29, at Pochunk Mountain, 6th; greatest

monthly range, 59, at Allaire; least monthly range, 84, at Atlantic City.

Precipitation.—The average was 0.23 above the normal; greatest monthly, 6.88, at Butler; least monthly, 2.55, at Hammonton.

Wind.—Prevailing direction, southwest.—E. W. McGann, Observer, Weather Bureau, New Brunswick. director.

# NEW MEXICO.

Temperature. — Maximum, 96, at Socorro, 31st; minimum, 10, at Fort Wingate, 1st; greatest monthly range, 65, at Springer and Chama; least monthly range, 45, at La Luz.

Precipitation.—Greatest monthly, 3.92, at Halls Peak; least monthly, 0.45, at Albuquerque.—H. B. Hersey, Observer, Weather Bureau, Santa Fe, director.

## NEW YORK.

Temperature.—The mean was 0.6 below the normal; maximum, 93, at Rome, 12th and 14th, and at Madison Barracks, 23d; minimum, 25, at Utica, 20th; greatest monthly range, 65, at Utica; least monthly range, 42, at Buffalo and Fort Niagara.

Precipitation.—The average was 2.55 above the normal; greatest monthly,

8.44, at Port Jervis; least monthly, 3.26, at Plattsburg Barracks.

Wind.—Prevailing direction, west.—Prof. E. A. Fuertes, Dean of the College of Civil Engineering, Cornell University, Ithaca, director; R. M. Hardinge, Observer, Weather Bureau, assistant.

## NORTH CAROLINA.

Temperature.—The mean was 2.0 below the normal; maximum, 100, at Rockingham, 22d; minimum, 32, at Blowing Rock, 11th; greatest monthly range, 59, at Rockingham; least monthly range, 28, at Hatteras.

Precipitation.—The average was 2.28 above the normal; greatest monthly,

9.75, at Lewiston; least monthly, 2.86, at Tarboro.

Wind.—Prevailing direction, southwest.—Dr. Herbert B. Battle, Raleigh, director; C. F. von Herrmann, Observer, Weather Bureau, assistant.

### NORTH DAKOTA.

Temperature.—The mean was 1.1 below the normal: maximum, 97, at Sykeston, 18th; minimum, 19, at Mayville, 2d; greatest monthly range, 72, at Dawson; least monthly range, 49, at Moorhead, Minn.

Precipitation.—The average was 0.64 below the normal; greatest monthly,

4.79, at Fort Buford; least monthly, 0.40, at Dawson.

Wind .- Prevailing direction, southeast .- W. H. Fallon, Observer, Weather Bureau, Bismarck, director.

# OHIO WEATHER AND CROP SERVICE.

Temperature.—The mean was 1.3 above the normal; maximum, 94, at McArthur, 14th, and at Portsmouth, 20th, 21st, and 22d; minimum, 23, at Chicago Junction, 7th; greatest monthly range, 62, at McArthur; least monthly range, 32, at New Berlin.

Precipitation.—The average was 0.37 above the normal; greatest monthly, 11.67, at Hillhouse; least monthly, 1.24, at Toledo.

Wind.—Prevailing direction, southwest.—L. N. Bonham, Columbus, director; C. M. Strong, Observer, Weather Bureau, assistant.

Temperature.—Maximum, 104, at Mangum, 30th; minimum, 29, at Gate City, 1st; greatest monthly range, 55, at Ponca; least monthly range, 20, at Stillwater

Precipitation.—Greatest monthly, 6.04, at Sallisaw; least monthly, 1.04, at

Gate City.

Wind.—Prevailing direction, south.—J. I. Widmeyer, Observer, Weather Bureau, Oklahoma City, director.

# OREGON.

The month was the coldest May on record, and a marked absence of sun-shine and cold weather retarded vegetation and seriously injured the fruit

Canyon City and New Bridge, 13th; minimum, 21, at Diamond; 24th; greatest monthly range, 64, at Happy Valley; least monthly range, 22, at Bandon.

Precipitation.—The average was 0.74 above the normal; greatest monthly, 5.68, at Glenora; least monthly, trace, at Burns.

Wind.—Prevailing direction, southwest.—Hon. H. E. Hayes, Master State Grange, Portland, director; B. S. Pague, Local Forecast Official, Weather Bureau, assistant.

# PENNSYLVANIA.

Temperature.—The mean was 1.3 below the normal: maximum, 98, at Kilmer, 23d; minimum, 26, at Wellsboro, 8th; greatest monthly range, 60, at Hollidaysburg; least monthly range, 44, at West Chester.

Precipitation.—The average was 1.45 above the normal; greatest monthly,

9.20, at Blue Knob; least monthly, 2.92, at Philadelphia.

Wind.—Prevailing direction, northwest.—Under direction of the Franklin Institute, Philadelphia; W. P. Tatham, director; H. L. Ball, Observer, Weather Bureau, assistant.

# SOUTH CAROLINA.

Temperature. - Maximum, 97, at Kitchings Mills, 26th and 27th, and at

Cheraw, 27th; minimum, 38, at Greenville, 4th.

Precipitation.—Greatest monthly, 6.84, at Allendale; least monthly, 2.84, at
Batesburg.—J. H. Harmon, Observer, Weather Bureau, Columbia, director.

# SOUTH DAKOTA.

Temperature.-The mean was 1.4 below the normal; maximum, 98, at Oelrichs, 18th; minimum, 16, at Ashcroft, 1st; greatest monthly range, 76, at Oelrichs; least monthly range, 46, at Mellette.

Precipitation.—The average was 0.67 below the normal; greatest monthly,

5.94, at Salem; least monthly, trace, at Oelrichs.

Wind.—Prevailing direction, northwest.—S. W. Glenn, Local Forecast Official, Weather Bureau, Huron, director.

## TENNESSEE WEATHER AND CROP SERVICE.

Temperature.—The mean was 0.4 below the normal; maximum, 96, at Covington, 26th; minimum, 86, at Springdale, 18th; greatest monthly range, 52, at Springdale and Milan; least monthly range, 36, at Florence Station.

Precipitation.—The average was 3.70 above the normal; greatest monthly,

14.69, at Lynnville; least monthly, 8.78, at Harrowgate.

Wind.—Prevailing direction, south.—J. B. Marbury, Local Forecast Official, Weather Bureau, Nashville, director.

# TEXAS.

Temperature.—The mean was 0.7 below the normal; maximum, 108, at Temperature.—The mean was 0.7 below the normal; maximum, 108, at Wichta Falls, 30th; minimum, 21, at Coldwater, 1st; greatest monthly range, 76, at Coldwater; least monthly range, 25, at Flower Bluff.

Precipitation.—The average was 0.07 below the normal; greatest monthly, 9.10, at College Station; least monthly, 0.26, at Luling.

Wind.—Prevailing direction, south.—D. D. Bryan, Galveston, director; I. M. Cline, Local Forecast Official, Weather Bureau, assistant.

Temperature.—The mean was 4.0 below the normal; maximum, 96, at Saint George, 11th and 16th; minimum, 12, at Scofield, 7th; greatest monthly range, 71, at Soldier Summit; least monthly range, 42, at Heber.

Precipitation.—Greatest monthly, 1.78, at Logan; least monthly, trace, at

Wind. — Prevailing direction, southwest. — G. N. Salisbury, Observer, Weather Bureau, Salt Lake City, director.

Temperature.—Maximum, 94, at Nottoway, 22d; minimum, 27, at Dale Enterprise, 10th; greatest monthly range, 58, at Dale Enterprise; least monthly range, 39, at Salem.

Precipitation.—Greatest monthly, 8.68, at Stanardsville; least monthly,

4.02, at Columbia.

Wind.—Prevailing direction, south. — Dr. E. A. Craighill, Lynchburg. director; J. N. Ryker, Observer, Weather Bureau, assistant.

### WASHINGTON.

Temperature.—The mean was 2.8 below the normal; maximum, 85, at Moxee, 26th; minimum, 31, at Moxee, 9th; greatest monthly range, 54, at Moxee; least monthly range, 20, at Tatoosh Island.

Precipitation.—The average was 1.19 above the normal; greatest monthly, 6.73, at Neah Bay; least monthly, 1.03, at Pine Hill.

Wind. - Prevailing direction, southwest. - H. F. Alciatore, Observer, Weather Bureau, Olympia, director.

## WEST VIRGINIA.

Temperature.—Maximum, 92, at Central Station, 21st; minimum, 30, at Davis, 10th; greatest monthly range, 57, at Buckhannon; least monthly range, 40, at New Martinsville.

Precipitation.—Greatest monthly, 7.85, at Bluefield; least monthly, 2.65, at Point Pleasant.

Wind. - Prevailing direction, west. - W. W. Dent, Observer, Weather Bureau, Parkersburg, director.

### WISCONSIN.

Temperature.—The mean was about 4.0 below the normal; maximum, 90,

at Koepenick, 31st; minimum, 17, at Butternut, 7th.

Precipitation.—The average was below the normal, except in several northcentral counties; greatest monthly, 5.23, at Baraboo; least monthly, 0.49, at Cadiz.—W. L. Moore, Local Forecast Official, Weather Bureau, Milwaukee, director.

Temperature.-Maximum, 91, at Lusk, 17th; minimum, 16, at Laramie, 1st; greatest monthly range, 69, at Lusk and Sundance; least monthly range, 52, at Saratoga.

Precipitation. -Greatest monthly, 3.49, at Sundance; least monthly, 0.31, at Evanston.

Wind.—Prevailing direction, west.—E. M. Ravenscraft, Observer, Weather Bureau, Cheyenne, director.

# METEOROLOGICAL TABLES.

Meteorological record of voluntary and other co-operating observers, May, !

Stations.	Temperature. (Fahrenheit.)			p'n.	94-4:	Ter (Fa	p'n		
	Max.	Min.	Mean.	Precip'n.	Stations.	Max.	Mib.	Mean	Precip'n.
Alabama.		۰	0	Ins.	Alabama—Cont'd.		۰	٠,	Ins.
Alco	93	50	73-1		Union Springs b †	93	48	71.4	10.68
Bermuda # † 5	89	50	71.6	4.36	Uniontown	92	54 38	71.8	10.88
Brewton †	92	47	71.5	7.30	Valley Head †1	87		64.0	5.72
Camden *1	91	60	71.4	7.10	Warrior † Wilsonville †			•••••	9.08
arrollton † 1 Stronelle †	89		69.8	8.14	Alaska.	••••			<b>6.22</b>
laiborne Landing†	99	57	74·I	9-40	Metlakahtla †	68	29	47.6	10.84
ordova t				7.20	Arizona.	~~		4,	-0.04
ordova† Daphne†	86	56	73.0	6.26	Antelope Valley †			• • • • • • •	0.61
Jecatur a T				8.16	Ariz. Can. Co. Dam.†	IOI			1.12
Decatur b†	93	40	67.6	8.16	Benson *8	98	60	79-3	0.76
Demopolis†				9.71	Buckeye†	IIO	46	74.2	0.50
Clba * † 1	88	54	72.2	6.58	Calabasas †	O.A.	39	67.6	0.00
ufaulaa		52	72.7	5.5I	Casa Grande * 8	IOI .	60	80·3	0.07
ufaulab†	91	-52	73.4	5.19	Chiricahua Mts†				1.76
ufaula cf	• • • • •		•••••	4.92	Dragoon † Dragoon Summit **	••••	•••••		1.40
vergreen †	92	49	72-6	4.71	Dragoon Summit	90	50	74.2	1.62
lorence at lorence b†1		•••••		7.77 10.28	Eagle Pass. *3 Florence†		48	64.8	0.69
ort Deposit †	90	44	69.0	8.10	Fort Apache	103	42	73.8 58.9	2.18
adsden †	95	51	72.5	8.72	Fort Bowie †	89	30 45	68.3	0.30
leneva†	94	56	76.0	4.03	Fort Grant	91	40	67.7	0.58
reensboro † 1	85	50	70.2	11.85	Fort Huachuca		41	67.7 66.8	0.26
lealing Springs †	96		,	11.47	Fort Mohave		50	78.2	0.26
lighland Home t	GO :	52	71.3	6.55	Gila Bend a † 1	102	52	79.6	0.40
ivingston a † 1	87	50	69.4	8.43	Gila Bend b *8		6o	78-6	
.ivingston 6 †	94	48	71.9	8.43 8.78	Holbrook †	89	26	60.5 82.8	1.39
vnn a t				8-34	Maricopa*8		64		0.64
ynn o † 1	89	45	70.8	9.07	Mount Huachuca †.	93	40	67.5	0.60
rabie Glose;	88*	40	66.9	8.20	Natural Bridget	****	•••••	• • • • • • • • • • • • • • • • • • • •	1.95
(arion † (aysville † 1	92	50	72.0	10.80	Oracle†1	88	43	67.8	
fount Willing†	90	50	67.5	6.21	Oro	0		•====	1.80 0.80
ewbern†	92	52	72.9	9.12	Palomas † Pantano *8	100	42	75· I	0.50
lewberg+	90	52 41	71.0 67.4	8.45 6.60	Payson *1	82	57	75·8 59·6	1.70
lewberg†	93 92	50		4.07	Peoria†	00	37 50	75.0	1.47
pelika†	02	50	73·3 71·8	5.31	Phoenix a t	102	43	74.6	1.00
xanna * † 1	93 88	44	65.9	7.77	Phonixa† Red Rock*†5	105	73	85.2	T
ine Apple †		48		5.74	Revmert	95	45	71.1	0.78
ine Apple† ushmataha†¹	88	54	72·4 72·8	10.27	Rye				1.50
elmsat				9.48	Rye St. Helena R'h * † ¹ .	95	52	70.4	0.36
turdevant †				4.10	San Carlos San Simon*8	99	36	69.2	0.67
alladega † allassee Fails †			• • • • • •	6.32	San Simon*8	IOI	62	80.5	0.00
aliassee Falls †				5.79	Signal † Texas Hill * 8	99	47	73·3 77·8	0.60
homasville †	90	56	73·2 66·0	5.09	Texas Hill *8	108	55	77.8	0.00
'uscumbiaa*1		50		6.54	Tueson a†	103	46	75.2	1.09
Tuscumbia 6†	93 88	46	70.0	6.69	Tueson b * 8	98	36	71.8	0.95
Union †	85	54	71.0	13.05 9.60	Walnut Ranch * † 1. Whipple Barracks.		44	65.7	0.81

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			o'n.		Tei (Fs	ğ,		
	Max.	Min.	Мевл	Precip'n.	Stations.	Max.	Min.	Мезп	Precip'u.
Alabama—Cont'd.	0	0	۰	Ins.	California-Cont'd.	۰		•	Ins.
Wilgus †				0.35	Anderson *1	93	40	64.2	1.54
Willcox*8	100	48	70.4	0.50	Antioch *8	90	52	65.2	0.41
Yuma*8	101	60	78.6	0.31	Arcata t	75 <sup>m</sup>	35 <sup>m</sup>	57 · O <sup>th</sup>	
Arkansas.		·		i	Arlington Heights.	93	43	64.2	0.00
Arkadelphia†		•••••	· · · · · ·	10.20	Athlone*8	94	54	69.9	0.00
Arkansas City†				5.77	Auburn*8	90	47	64. I	0.78
Ashdown † 1	92 86	45	68-4	10.30	Bakersfield a *8	96	59	75.0	0.00
Bee Branch †		44		11-59	Bakersfield b †	94	38	65.2	0.00
Brinkley t	87	49	68.2	15.20	Ballast Point L. H.	•			0-20
Camden a †	80		69. I	10.80	Barstow† Beaumont *8	92 81	48	70.8	T
Conway #1	84	50 53		7.81 11.32	Belmont * 8	82	47	63.4	0.00
Corning †	QI	33 41		6.35	Berendo * 8	96	43 60	75.7	0.00
Dallas T	85	44	67.5 67.8	10.00	Berkeley	80	44	58.0	0.26
Dardanelle†		77		13-25	Biggs		77	30.0	1.81
Fayetteville †	85	41	64.2	10.96	Bishop Creek *8	95	50	70.3	0.00
Forrest †	90	50		15-44	Bishop Creek *8 Boca *8.	77	25	47.1	1.39
Fulton t	J-			10.18	Borden *8	92	54	71.3	0.00
Jaines Landing t				5.82	Boulder Creek * 8	8g	40	58.5	0.65
Hamburg	88	50	70.8	5.91	Brentwood *8	90	56	68.0	0.40
Helenaat				16.68	Brighton * 5	92	47	68.2	0.60
Helenab†	94	48	70. I	14.75	Byron ** Caliente **	92	54	69.0	0.38
Hot Springs		39		10.10	Caliente * 8	90	50	70.3	0.00
Jonesboro	94 88	50	68. o	10.03	Calistoga*8	92	48	63.9	0.86
Keesees Ferry†	92	38	65.6	5.27	Campo Seco				0.41
Kirby †	86	44	68. o	5.21	C. Mendocino L. H.		• • • • • •		2.02
Lonoke * 1	92	53		19.88	Capitola *8	80	52	62.8	0.00
Madding		•••••		10.00	Castroville*8	72	51	58.4	0.15
Malvern	86	45	66.6	7.43 8.87	Centerville *1	88	•••••	57.6	0.47
Marcella	90	53	72.6		Chico *8 Chino *6	92	42	64-8	T.34
Melbourne† Mount Nebo†	90 82	40	68-6	7·34	Cisco *8	94 56	54 18	67.2	
New Gascony*1	87	44	64.0	8.46	Citrus #2	96		38.1 66.8	0.00
Newport a †		54	פיציט	9.13	Claremont †	go .	38	60.6	0.17
Newport of		52	69.8	8.36	Cloverdale # 1	93	44	66.9	1.10
Newport ci	93 88	49	69.0	5.87	Colegrove	33			0.04
Osceola † 1	89	50		15.16	Colfax *8	82	40	59.8	1.30
Pine Bluff†	QÁ	50	71.7	6.19	Colton *8	98	44	65.8	0.00
Prescott	88	50		10.07	Colusa † b	90	40	66.0	1.43
Rogers †				7.23	Corning *8	96	48	67.2	0.22
Russellville†	92	45	68. I	11.46	Crescent City				3.60
searcy † 1	90	49		10.77	Crescent City L. H.				3-47
tuttgart †	90	50		9.55	Crofton #8	92	53	71.2	0.38
l'exarkana†	94	47 48	73.2	5.97	Davisville a *8	90	55 48	71.0	1.56
Washington b* † 1	88	48	69.5	11.00	Davisvilleb	92		66.8	0.82
W 1ggs	• • • • •	•••••	• • • • • • •	8.19	Delano *8	89	61	70.9	0.00
Winslow * † 1	77	45	64.0	7.23	Delta * 8	95	45	64.7	3.30
					Downey *8	92	52	66.6	0.07
California.	103	49	72.6	0.00	Drytown	93 96	36	61.2	1.57